

C1 22876

SEQUENCE NO.  
(MDE USE ONLY)STATE OF MARYLAND  
WELL COMPLETION REPORT  
FILL IN THIS FORM COMPLETELY  
PLEASE TYPETHIS REPORT MUST BE SUBMITTED WITHIN  
45 DAYS AFTER WELL IS COMPLETED.COUNTY  
NUMBER1 2 3 6  
(THIS NUMBER IS TO BE PUNCHED  
IN COLS. 3-6 ON ALL CARDS)

ST/CO USE ONLY

DATE Received

MM DD YY  
05 21 14

DATE WELL COMPLETED

MM DD YY  
05 16 14

Depth of Well

22 320 26  
(TO NEAREST FOOT)PERMIT NO.  
FROM "PERMIT TO DRILL WELL"170-95-2678  
28 29 30 31 32 33 34 35 36 37OWNER Aumiller Nick  
WELL SITE ADDRESS 6559 Walnut Grove TOWN Columbia  
SUBDIVISION Clemens Square SECTION 1 LOT 19

## WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR  
COLOR, DEPTH, THICKNESS AND IF WATER BEARINGDESCRIPTION (Use  
additional sheets if needed)

FEET

FROM

TO

check  
if water  
bearing

Soil 0 5  
Red clay 5 12  
SAND 12 21  
Red clay 21 35  
Fractured Rock 35 60  
Med Gray Rock 60 320  
2 bores  
x 320

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED

yes

Y

no

N

CIRCLE APPROPRIATE LETTER

- A A WELL WAS ABANDONED AND SEALED  
WHEN THIS WELL WAS COMPLETED  
E ELECTRIC LOG OBTAINED  
P TEST WELL CONVERTED TO PRODUCTION  
WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN  
ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND  
IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE  
CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED  
HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY  
KNOWLEDGE.

DRILLERS LIC. NO. 1 MWD 355

DRILLERS SIGNATURE

(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 MSD 0666

SITE SUPERVISOR (sign. of driller or journeyman  
responsible for sitework if different from permittee)

## GROUTING RECORD

yes

no

WELL HAS BEEN GROUTED  
(Circle Appropriate Box)

Y

N

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CMBENTONITE CLAY BCNO. OF BAGS 15NO. OF POUNDS 750GALLONS OF WATER 375

DEPTH OF GROUT SEAL (to nearest foot)

from 0 TOP 52 ft. to 320 BOTTOM 58 ft.  
(enter 0 if from surface)

## CASING RECORD

casing  
types  
insert  
appropriate  
code  
below

ST

STEEL

CO

CONCRETE

PL

PLASTIC

OT

OTHER

MAIN  
CASING  
TYPENominal diameter  
top (main) casing  
(nearest inch)!Total depth  
of main casing  
(nearest foot)

ST

60 61 63 64 66 67 70

60 61 63 64 66 67 70

OTHER CASING (if used)

EACH CASING diameter depth (feet)  
inch from toscreen type  
or open hole

## SCREEN RECORD

(insert  
appropriate  
code  
below)

ST

STEEL

BR

BRASS

HO

OPEN

PL

BRONZE

OT

HOLE

PLASTIC

OTHER

C2 DEPTH (nearest ft.)

1 2  
E 1 8 9 11 15 17 21  
A 2 23 24 26 30 32 36  
C 3 38 39 41 45 47 51  
S R E E  
SLOT SIZE 1 2 3

DIAMETER  
OF SCREEN(NEAREST  
INCH)

56 60

from to

GRAVEL PACK

IF WELL DRILLED

WAS FLOWING WELL

INSERT F IN BOX 68

MDE USE ONLY

(NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.)

W Q

70 72

TELESCOPE  
CASINGLOG  
INDICATOR74 75 76  
OTHER DATA

C3

## PUMPING TEST

HOURS PUMPED (nearest hour)

8 9

PUMPING RATE (gal. per min.)

11 15

METHOD USED TO  
MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 20 ft.

WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test)

A air

P piston

T turbine

C centrifugal

R rotary

O other

J jet

S submersible

## PUMP INSTALLED

DRILLER INSTALLED PUMP YES NO  
(CIRCLE) (YES OR NO)IF DRILLER INSTALLS PUMP, THIS SECTION  
MUST BE COMPLETED FOR ALL WELLS.TYPE OF PUMP INSTALLED  
PLACE (A,C,J,P,R,S,T,O)  
IN BOX 29.CAPACITY:  
GALLONS PER MINUTE  
(to nearest gallon)

31 35

PUMP HORSE POWER

37 41

PUMP COLUMN LENGTH  
(nearest ft.)

43 47

CASING HEIGHT (circle appropriate box  
and enter casing height)

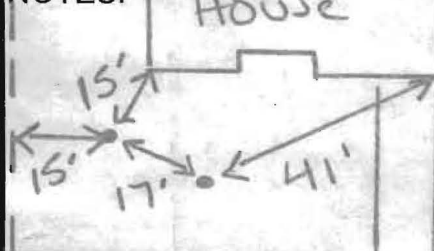
+ above

LAND SURFACE

- below

(nearest  
foot)LATITUDE 39.19178  
LONGITUDE 76.87251  
(DEFAULT COORD. WGS 84)

NOTES:





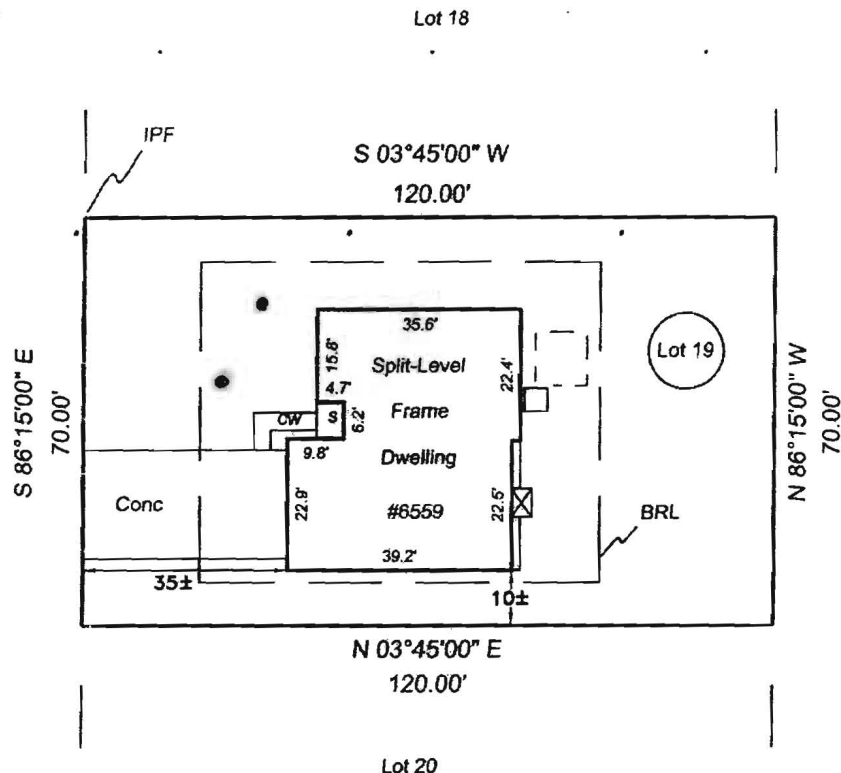
<b>B 1</b> 20060 <small>1 2 3 6</small>	SEQUENCE NO. (MDE USE ONLY)	<b>STATE OF MARYLAND</b> <b>APPLICATION FOR PERMIT TO DRILL WELL</b> please type 5510304	STATE PERMIT NUMBER <b>HO-95-2678</b> <small>70 79</small> fill in this form completely
<b>OWNER INFORMATION</b> Date Received (APA) 04/07/14 <small>8 MM DD YY 13</small> 15 Last Name <u>Aumiller</u> Owner First Name <u>NICK</u> 34 36 <u>6559 Walnut Grove</u> Street or RFD 55 57 <u>Columbia</u> Town 70 <u>MD</u> State 72 <u>21043</u> Zip 76		<b>B 3 LOCATION OF WELL</b> 8 COUNTY <u>Howard</u> 21 23 SUBDIVISION <u>Clemens Square</u> 42 SECTION <u>1</u> 44 46 LOT <u>19</u> 48 50 52 NEAREST TOWN <u>Columbia</u> 71	
<b>DRILLER INFORMATION</b> Driller's Name <u>Michael Barlow</u> M 76 License No. <u>W D 355</u> 81 Firm Name <u>Barlow Well Drilling</u> Address <u>522 Underwood Lane 21044</u> Signature <u>[Signature]</u> 3/25/14 Date		<b>B 4 SOURCES OF DRILLING WATER</b> 1. <u>Well</u> 2. 3. 11 STREET ADDRESS <u>6559 Walnut Grove</u> 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH <input checked="" type="radio"/> WEST <input type="radio"/> EAST <input type="radio"/> SOUTH <input type="radio"/> 34 <u>30</u> 37 DISTANCE FROM ROAD <u>FT</u> ENTER FT OR MI 38 39 TAX MAP: <u>36</u> BLK: <u>19</u> PARCEL <u>442</u>	
<b>B 2 WELL INFORMATION</b> APPROX. PUMPING RATE (GAL. PER MIN.) 8 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20		<b>NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL</b> COUNTY NAME <u>Howard</u> COUNTY NO. <u>13</u> STATE SIGNATURE _____ INSERT S → 41 DATE ISSUED <u>4/14/14</u> 43 MM DD YY 48 CO SIGNATURE <u>[Signature]</u> EXP. DATE <u>4/14/15</u>	
<b>USE FOR WATER (CIRCLE APPROPRIATE BOX)</b> <input checked="" type="radio"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="radio"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="radio"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="radio"/> PUBLIC WATER SUPPLY WELL <input type="radio"/> TEST, OBSERVATION, MONITORING <input type="radio"/> OPEN LOOP GEOTHERMAL <input type="radio"/> CLOSED LOOP GEOTHERMAL <u>2 bores x 320'</u>		APPROXIMATE DEPTH OF WELL <u>320</u> FEET APPROXIMATE DIAMETER OF WELL <u>6</u> INCH <b>METHOD OF DRILLING (circle one)</b> BORED (or Augered) JETTED Jetted & DRIVEN 30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTARY DRIVE-POINT other _____	
<b>REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)</b> <input checked="" type="radio"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="radio"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input type="radio"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="radio"/> THIS WELL WILL DEEPEEN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEENED (IF AVAILABLE) 41 _____ 52		PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL 	
Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROX. PERMIT NUMBER _____ G _____ PERMIT No. <u>HO-95-2678</u> <small>70 71 72 73 74 75 76 77 78 79</small>			
<b>SPECIAL CONDITIONS</b> NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED			



**NOTES:**

- 1) B.R.L. information, if shown, was obtained from existing record plot or local agencies and is not guaranteed by NTT, Inc.
- 2) Building line and/or Flood Zone information is subject to the interpretation of the originator.
- 3) NTT, Inc. does not certify to unknown or unrecorded encroachments or overlaps.
- 4) Property markers NOT found, or guaranteed by this location.
- 5) Setback distance accuracy: 2'±

Walnut Grove



\* Well location  
Approved 4/14/14  
-AG  
# HO-95-2678

Flood Plain Easement

• Geo bore

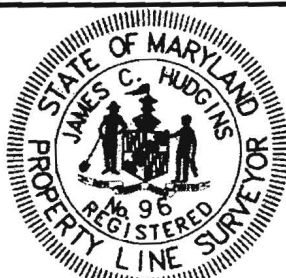
**Building Restriction Lines:**

Front.....20'  
Sides.....7.5'  
Rear.....30'

Subject property is shown in Zone C on the FIRM Map of Howard County, Maryland on Community Panel Number 2400440033B, Effective 12-4-86

This is to certify that I have surveyed the property shown hereon, being known as Lot 19, Section 1, Area 1, CLEMENS SQUARE and recorded among the land records of Howard County, Maryland in Plat 4115 for the purpose of locating the improvements thereon.

- This plot is of benefit to the consumer only insofar as it is required by a lender or a title insurance company or its agent in connection with contemplated transfer, financing, or refinancing purposes.
- This plot is not to be relied upon for the establishment of location of fences, garages, buildings, or other existing or future structures.
- This plot does not provide for the accurate identification of property boundary lines, but such identification may not be required for the transfer of title or for securing financing or refinancing.



J. Carl Hudgins PLS #96  
Expiration Date: 3/11/12

**LOCATION DRAWING**

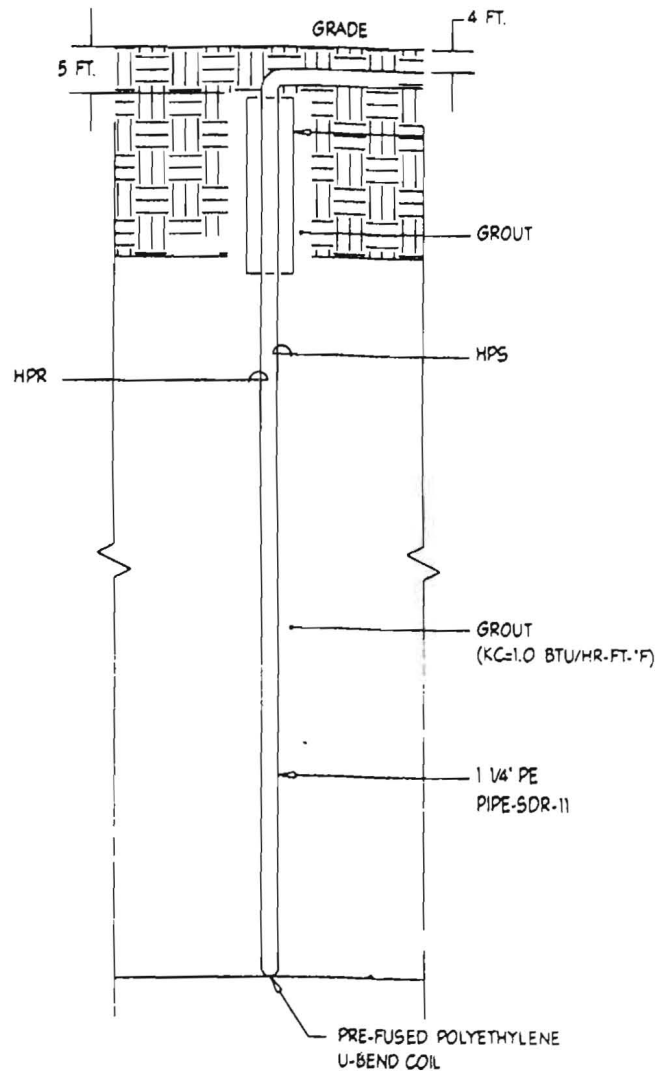
6559 WALNUT GROVE  
ELECTION DISTRICT No. 5  
HOWARD COUNTY, MARYLAND

**NTT Associates, Inc.**  
16205 Old Frederick Rd.  
Mt. Airy, Maryland 21771  
Phone: (410)442-2031  
Fax: (410)442-1315  
Website: www.nttsurveyors.com

Scale:   
Date: 10-8-11  
Field By: DR  
Drawn By: DR  
Drawing # 60580TIMS

1"=40'





4 TYPICAL BORE HOLE DETAIL  
 M11.00 NOT TO SCALE



**MICHAEL BARLOW WELL DRILLING  
522 UNDERWOOD LANE  
BEL AIR, MD 21014  
410-838-6910**

Howard County Health Department  
7178 Columbia Gateway Drive  
Columbia, MD 21046  
Fax: 410-313-2648

March 25, 2014

Re: 6559 Walnut Grove, Columbia

Dear Department of Environment:

Please note unless otherwise specified all geothermal bores installed by our company will be installed as follows:

Grout: Bentonite Grout 20% solids minimum  
Manufacture(s): Baroid or Wyo-Ben  
Will be grouted from the bottom to the top with grout material

Piping: Polyethylene SDR 11 160 PSI as recommended per IGSHPA  
Manufacture: EnDot or Charter Plastics or equal, Size 1" or 1 1/4"  
IGSHPA Certification Number 12687

Also attached is a cross section diagram of the bore hole.

We would appreciate your help in getting this permit released as soon as possible so that we can expedite this project. If you have any questions, please do not hesitate to contact me.

Sincerely,



Michael Barlow